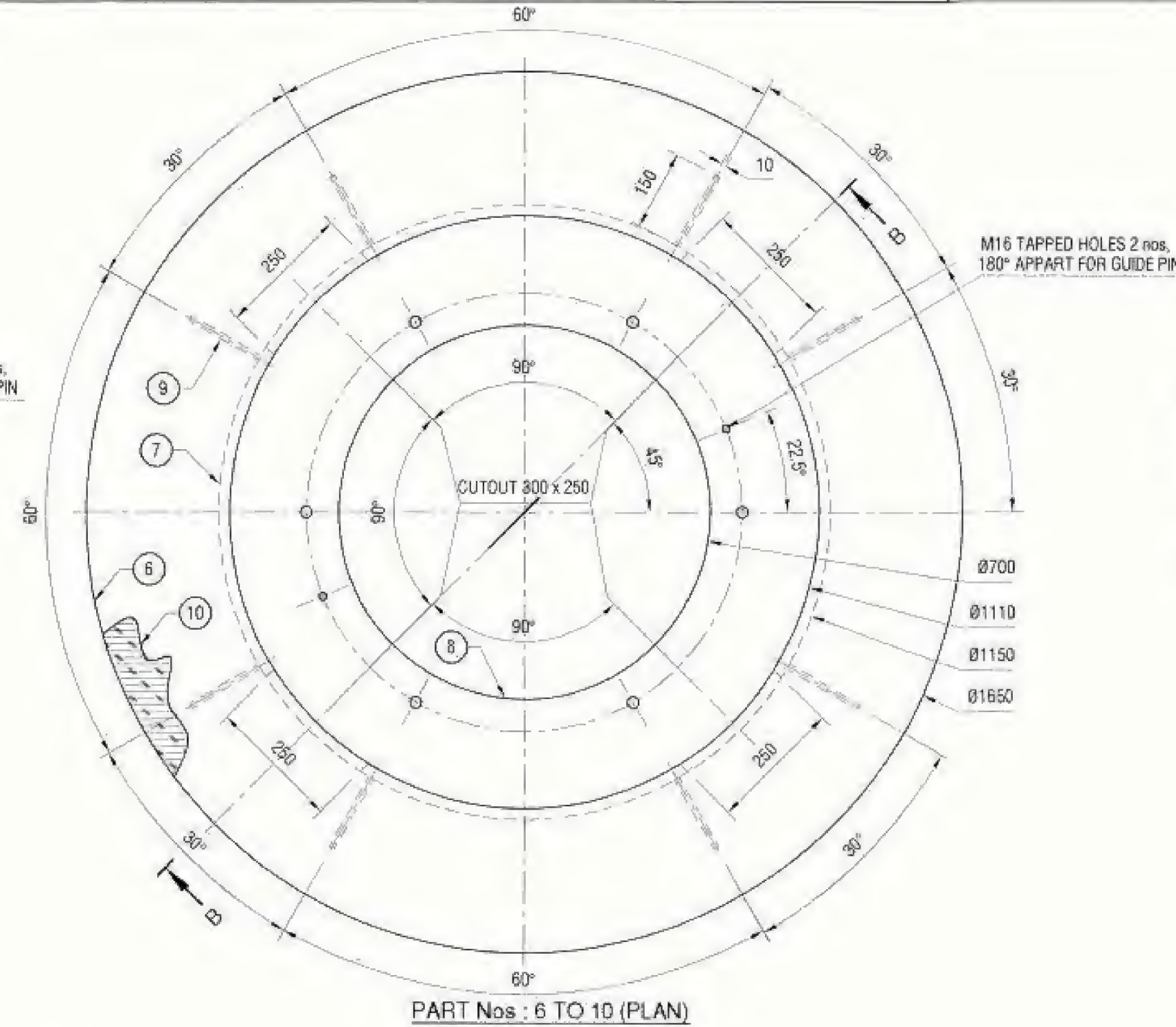
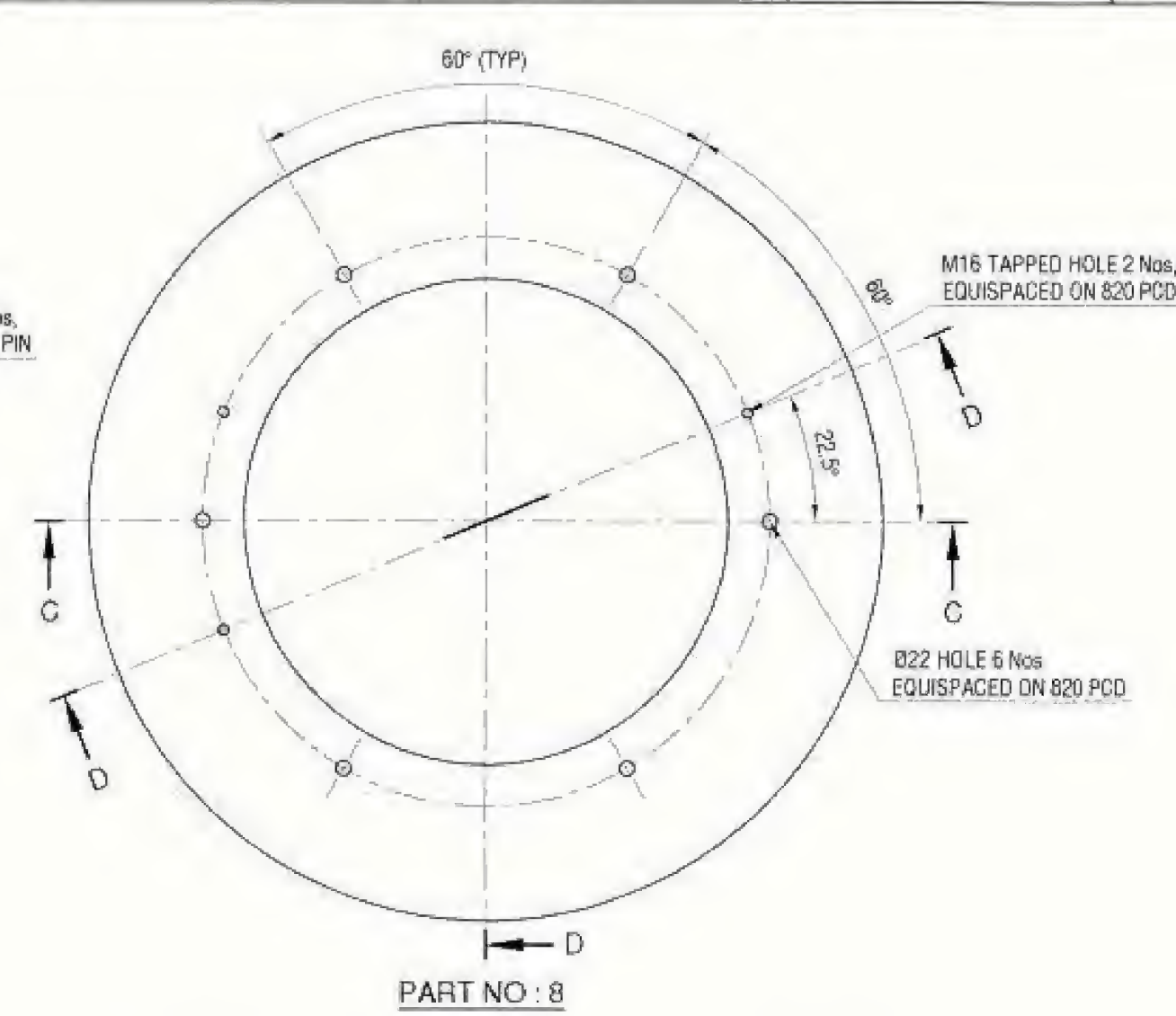


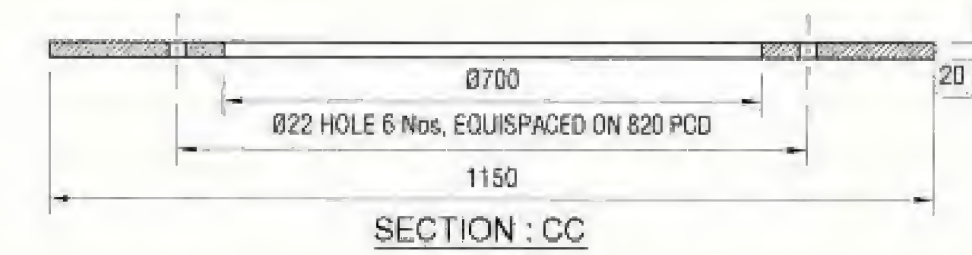
PLAN



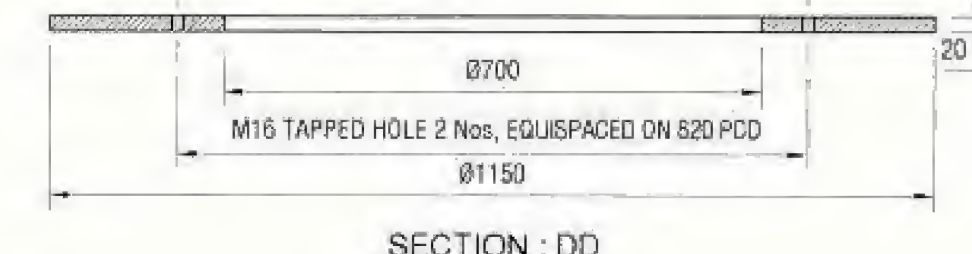
PART Nos : 6 TO 10 (PLAN)



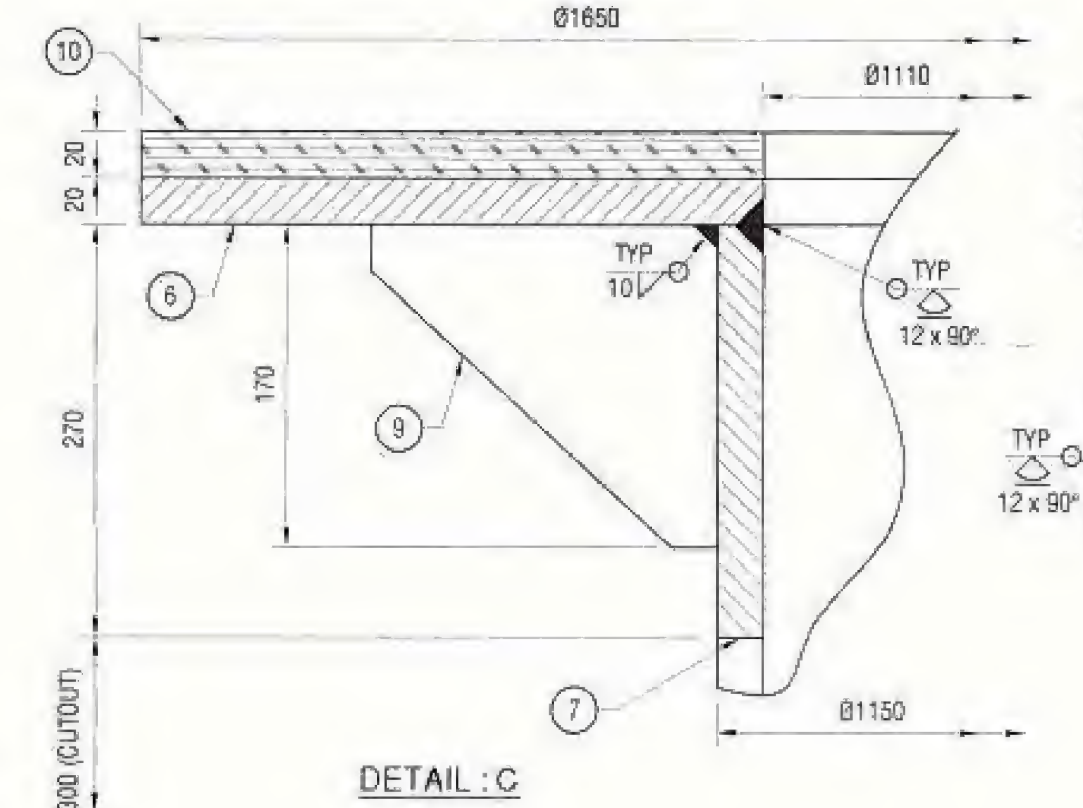
PART NO : 8



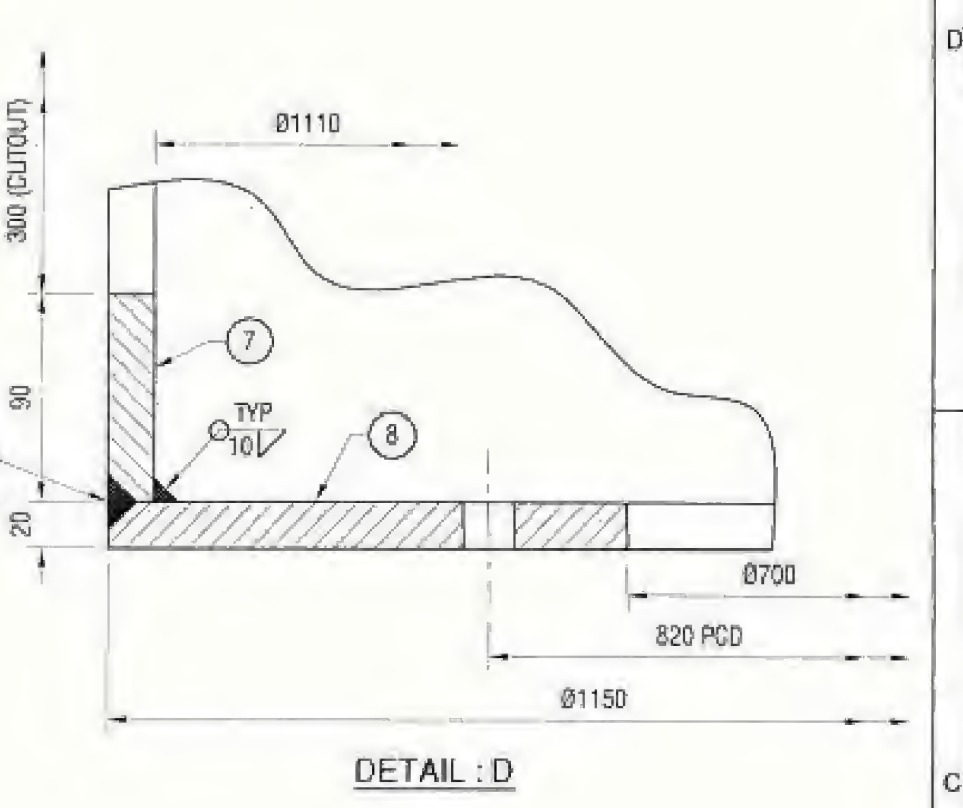
SECTION : CC



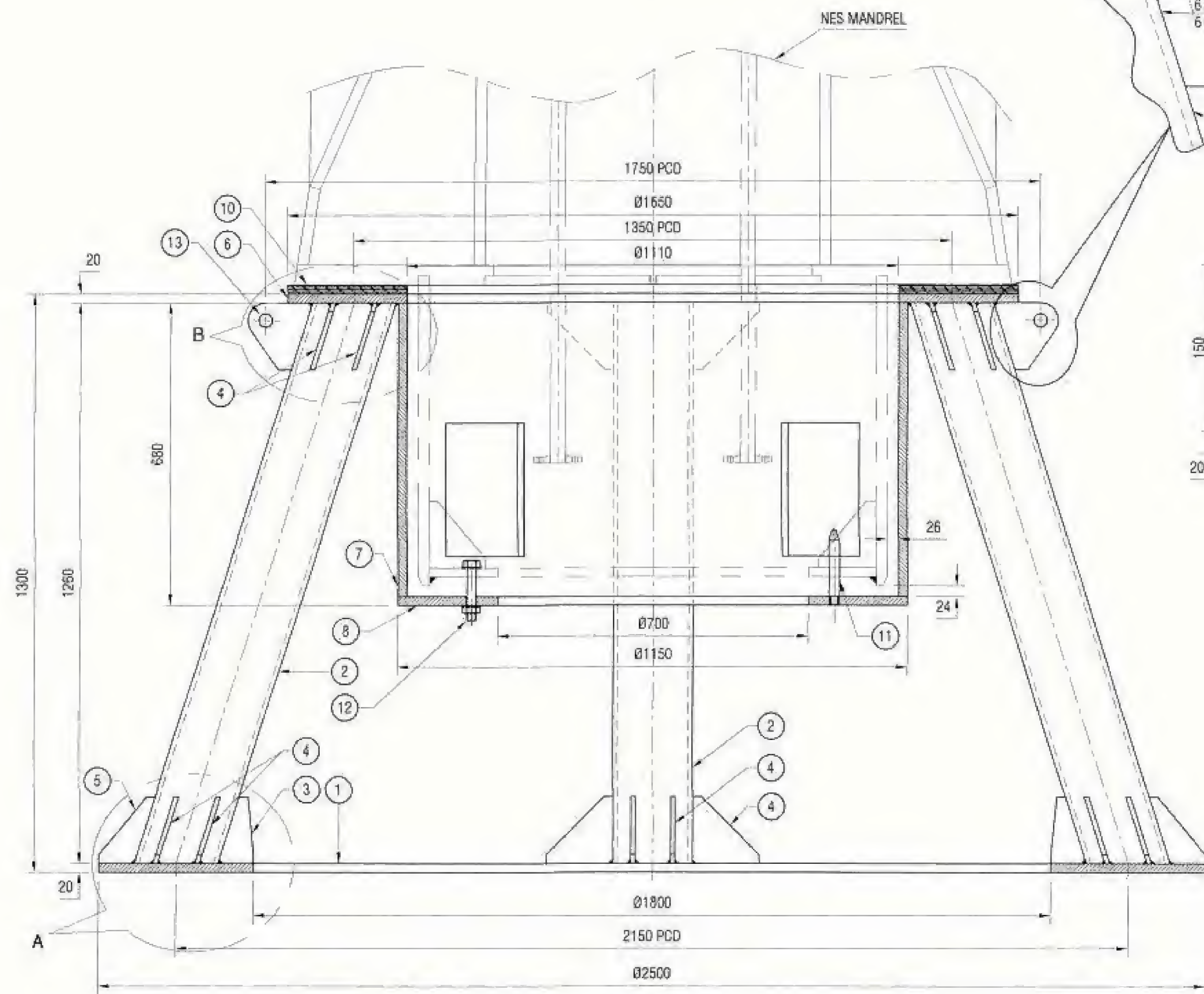
SECTION : DD



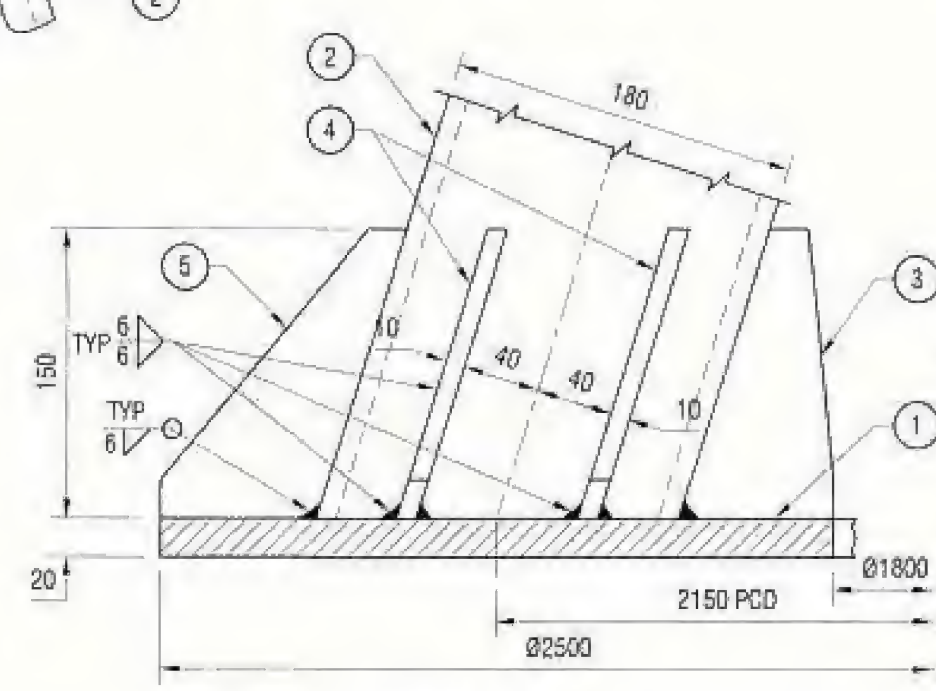
DETAIL : C



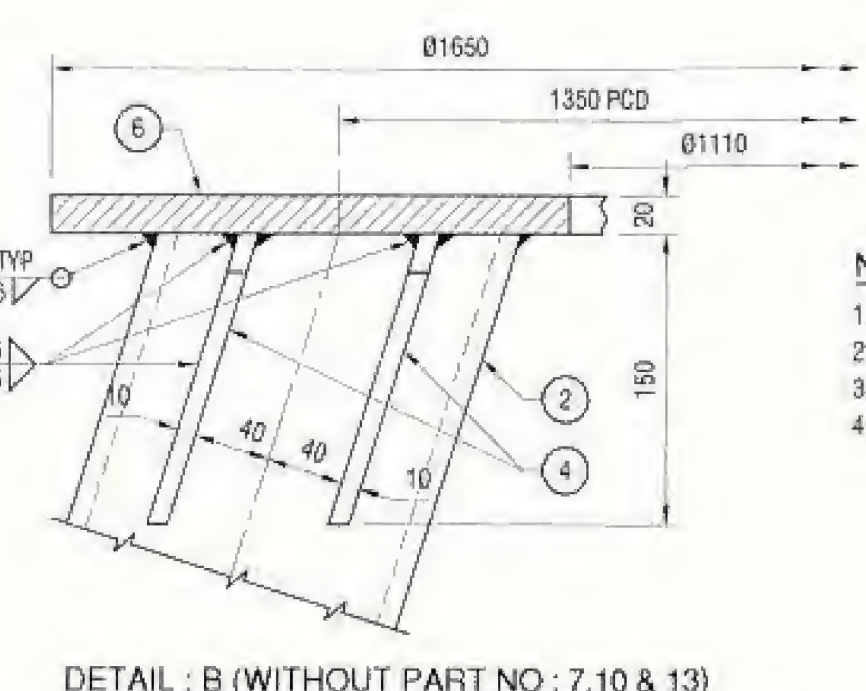
DETAIL : D



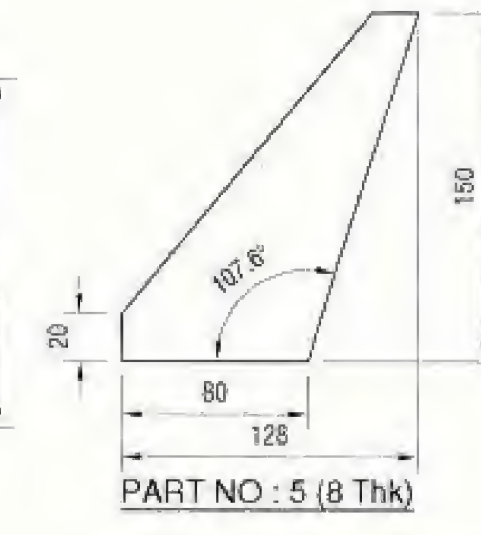
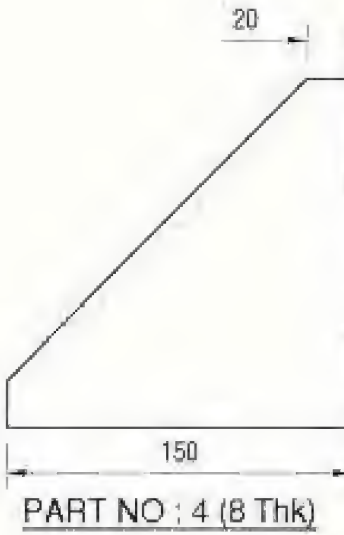
SECTION : AA



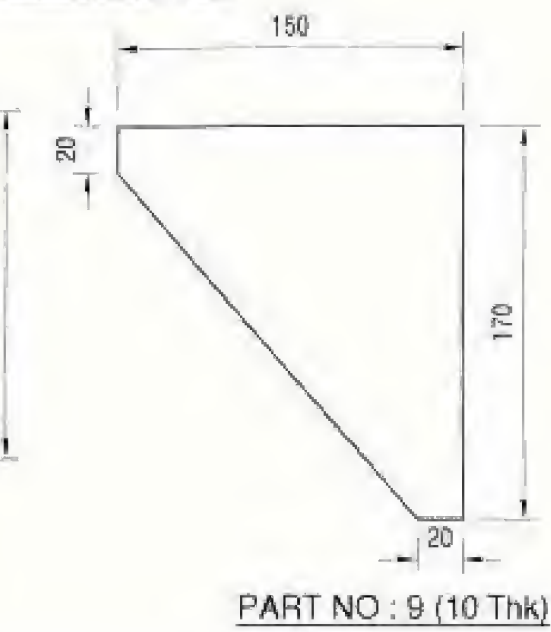
DETAIL : A



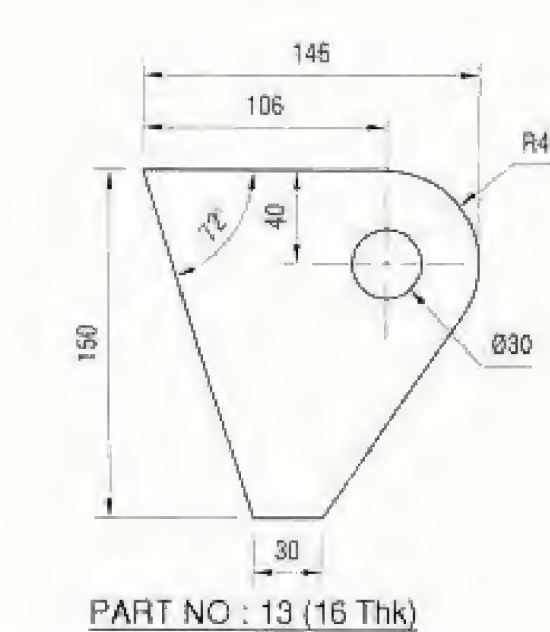
DETAIL : B (WITHOUT PART NO : 7, 10 & 13)



PART NO : 5 (8 Thk)



PART NO : 9 (10 Thk)



PART NO : 13 (16 Thk)

- NOTE:
1. ALL THE WELDS ARE OF 5mm SIZE FILLET WELDS UNLESS OTHERWISE SPECIFIED.
  2. ALL THE WELDS ARE TO BE DP TESTED FOR ROOT & FINAL PASSES.
  3. PART NO : 10 IS TO BE BONDED ON TO PART NO.8 WITH SUITABLE ADHESIVE.
  4. CHECK THE STATUS OF THE DRAWING BEFORE FABRICATION / MACHINING.

TOTAL WEIGHT : 1358 kg (Approx.)

S.NO	DESCRIPTION	MATERIAL	QTY	W.T	REMARKS
13	LIFTING LUG 150 x 145 x 16 Thk	IS : 2062 Fe 410-B	4	11	
12	M20 x 120 LONG, HEX BOLT & NUT WITH TOW WASHERS	IS : 1354	6	—	
11	GUIDE PIN Ø24 x 150 HEIGHT	IS : 2062 Fe 410-B	2	1	
10	RUBBER SHEET Ø1650 x Ø1110 x 20 Thk	NEOPRENE	1	—	
9	STIFFENER 140 x 150 x 10 Thk	IS : 2062 Fe 410-B	8	13	
8	ANNULAR PLATE, Ø1150 x Ø700 x 20Thk	IS : 2062 Fe 410-B	1	103	
7	SHELL Ø1150 x Ø1110 x 660 HEIGHT	IS : 2062 Fe 410-B	1	368	
6	ANNULAR PLATE, Ø1650 x Ø1110 x 20Thk	IS : 2062 Fe 410-B	1	184	
5	STIFFENER 128 x 150 x 10 Thk	IS : 2062 Fe 410-B	8	12	
4	STIFFENER 150 x 150 x 10 Thk	IS : 2062 Fe 410-B	32	57	
3	STIFFENER 80 x 150 x 10 Thk	IS : 2062 Fe 410-B	8	8	
2	SQUARE HOLLOW TUB - 1380 LONG 180 x 180 x 8 Thk	IS : 2062 Fe 410-B	4	231	
1	ANNULAR PLATE, Ø2500 x Ø1800 x 20Thk	IS : 2062 Fe 410-B	1	371	

STATUS	SIGN.	DATE
FOR DISCUSSION		21/08/18
FOR TENDER		21/08/18
FOR FABRICATION		

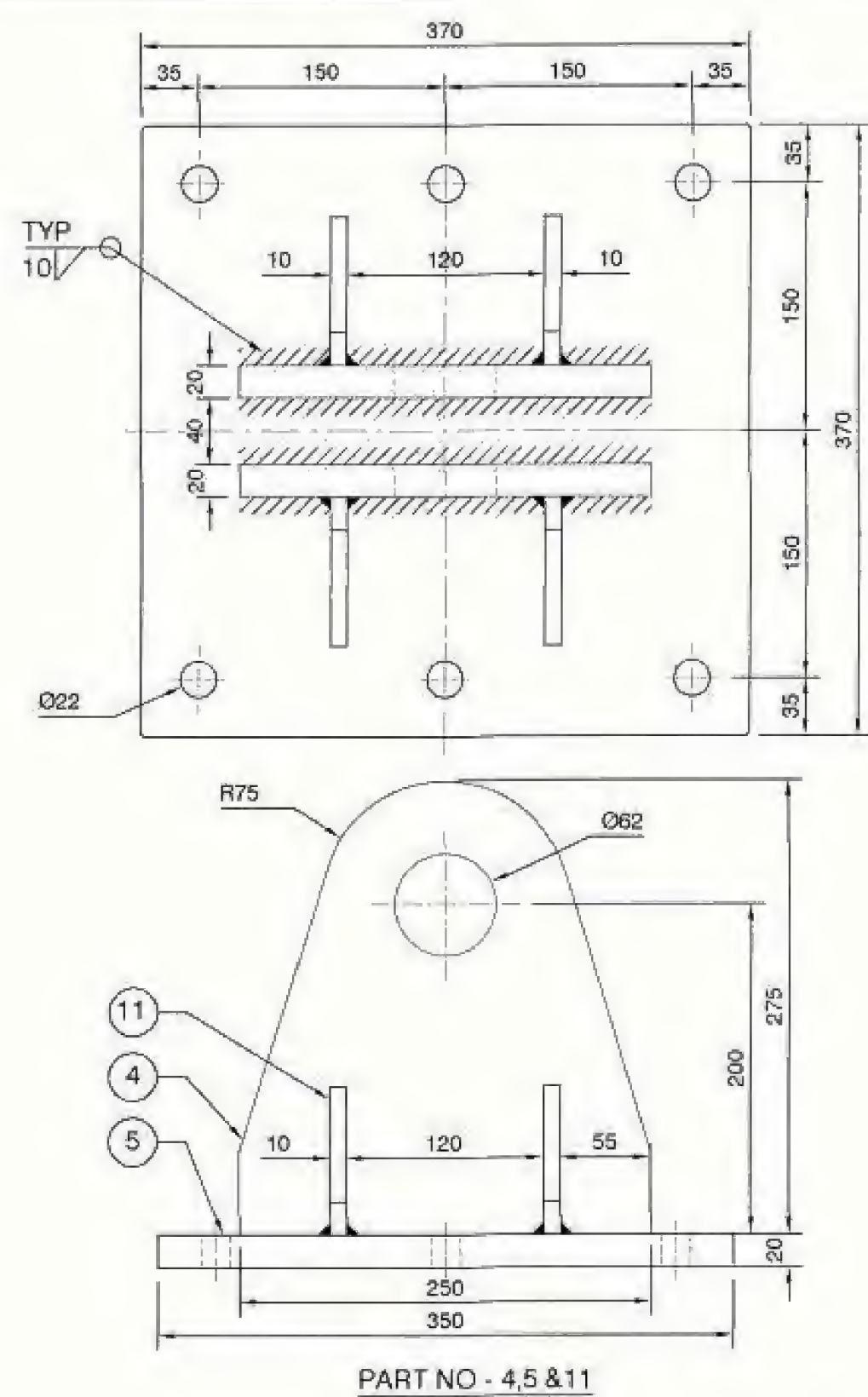
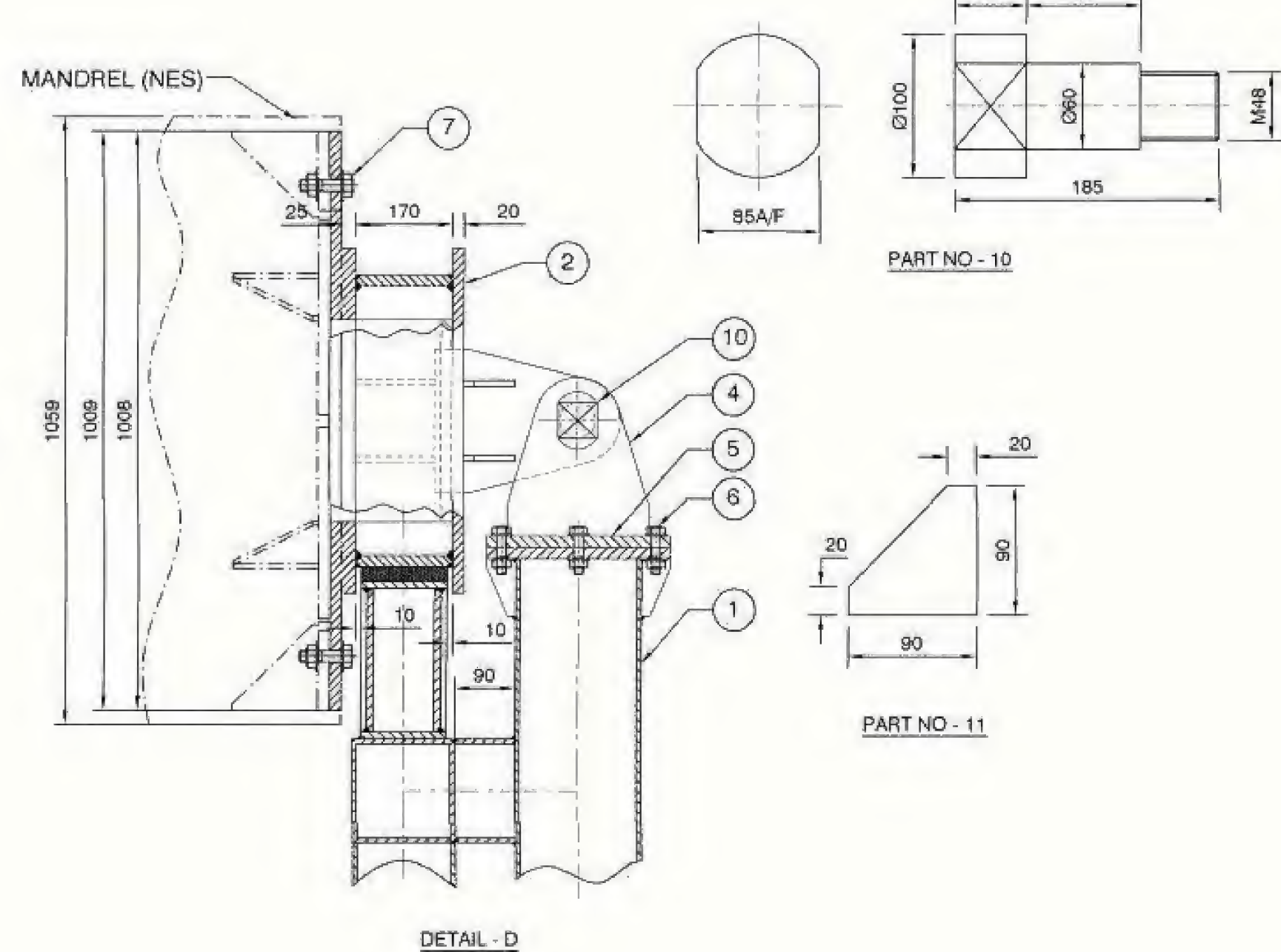
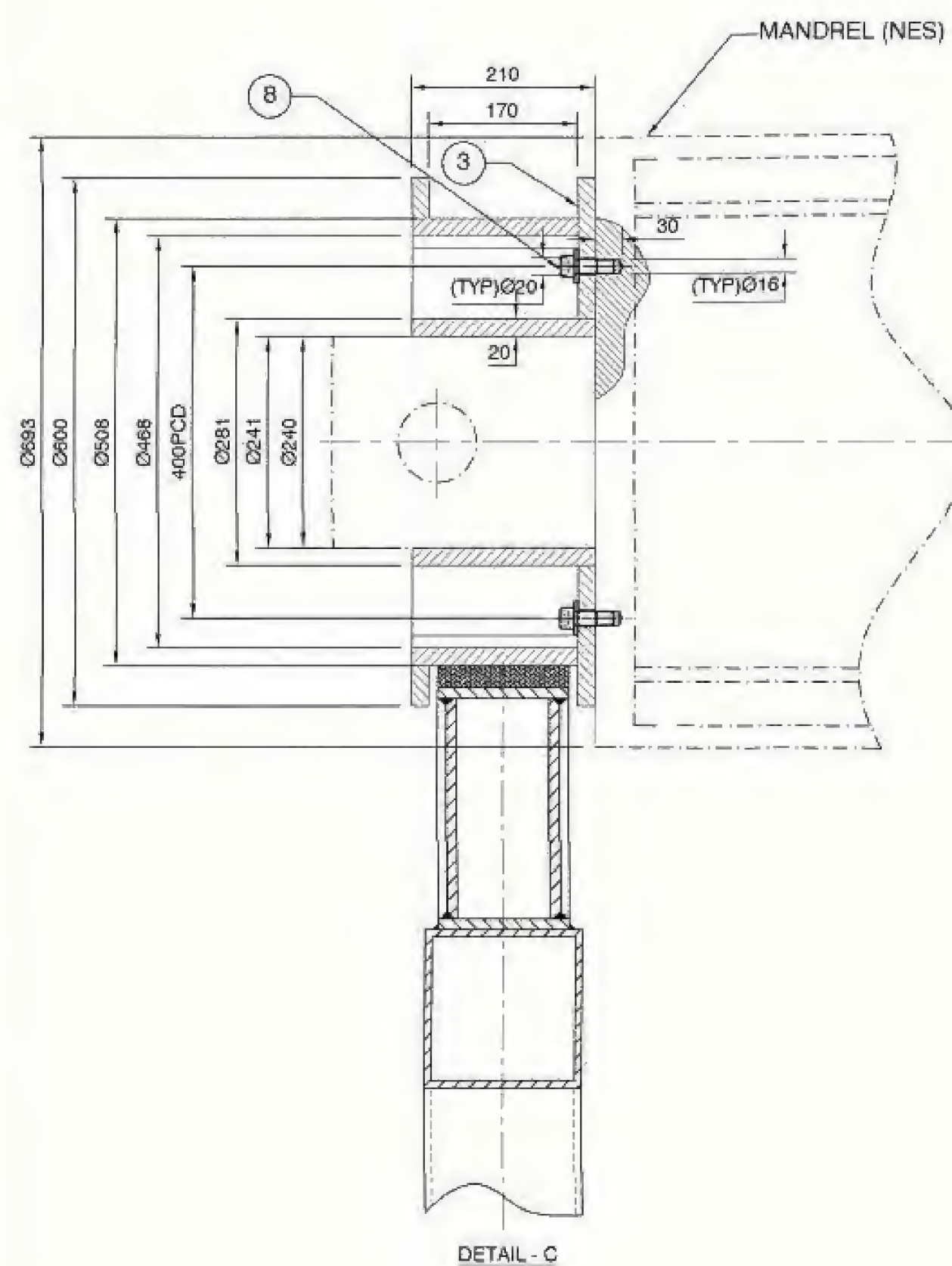
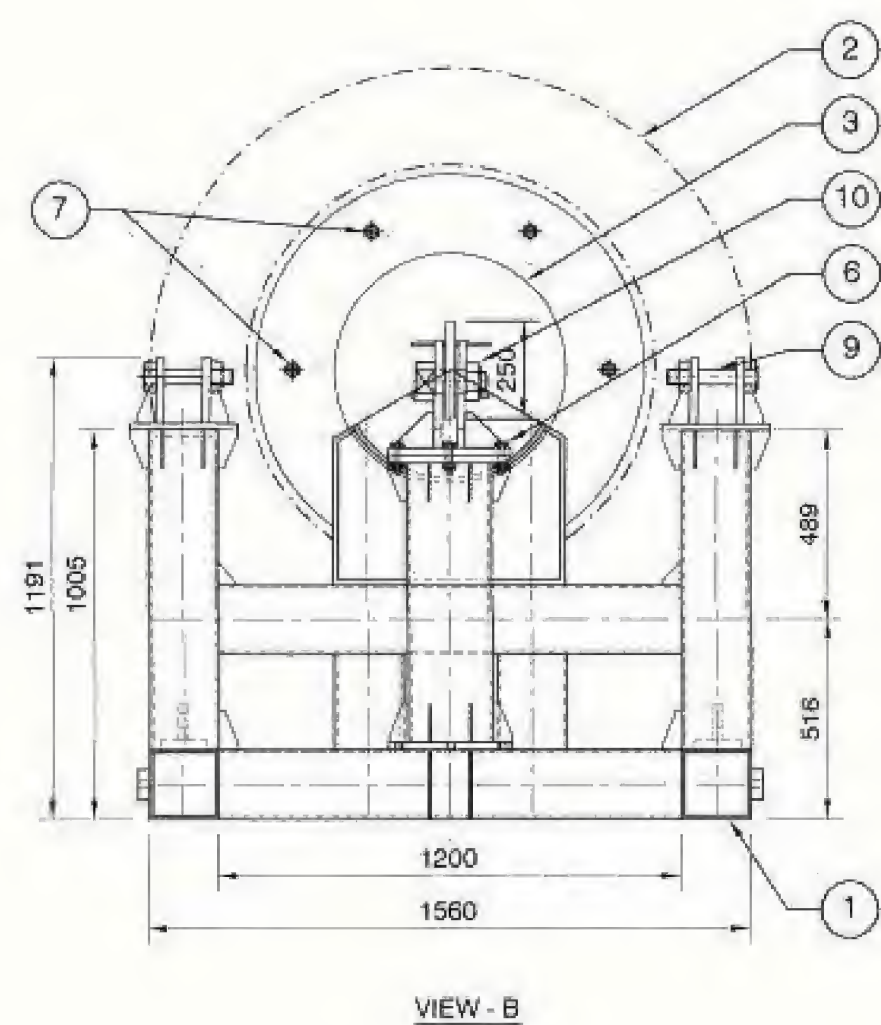
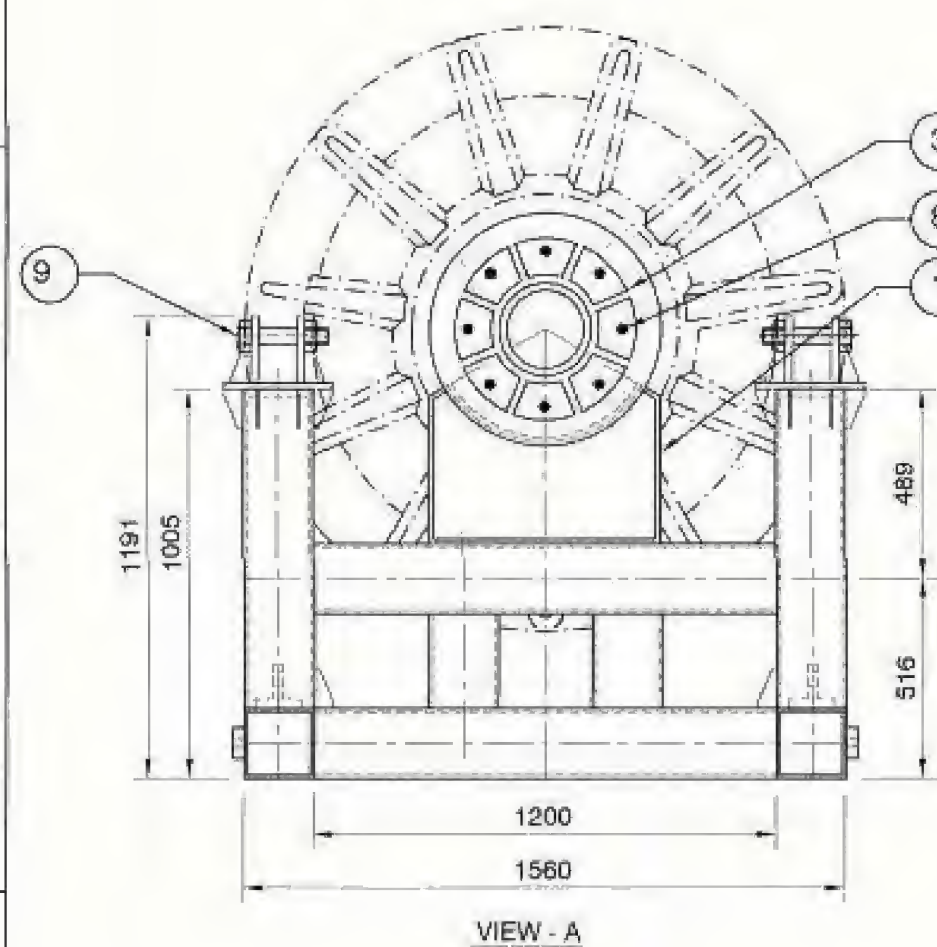
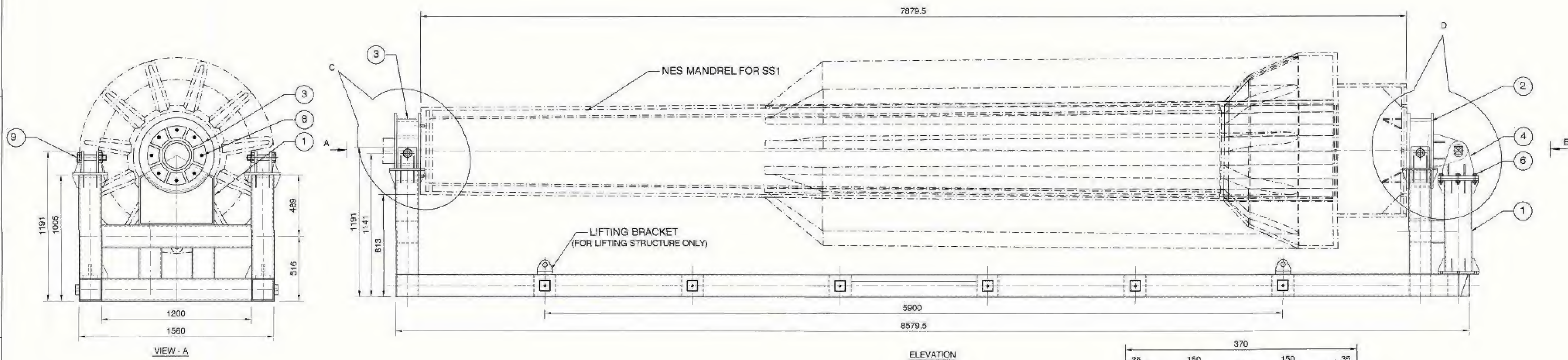
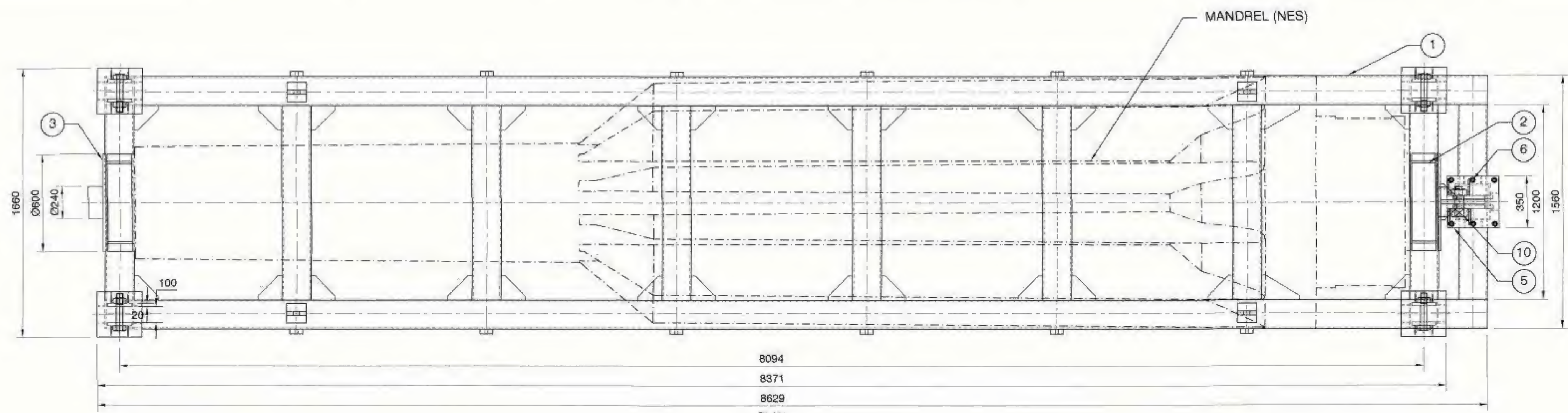
DO NOT SCALE THE DRAWING.  
ASK IF IN DOUBT  
UNLESS OTHERWISE SHOWN  
ALL DIMENSIONS ARE IN MILLIMETERS  
REMOVE SHARP EDGES & BURRS  
CHAMFER 1 M.M. X 45°  
MACHINING FINISH IN MICRONS :-  
▽ 8 - 25    ▽ 1.6 - 8  
▽▽ 0.025 - 1.6    ▽▽▽ < 0.025

DIAMETERS & LENGTHS	LENGTH IN M.M. OF SHORTER SIDE OF ANGLE UPTO & INCL.
UPTO & INCL. 6 +0.1 -0.2	1 - 6 ± 1°-00'
6 - 30 +0.2 -0.3	6 - 30 ± 0°-30'
30 - 120 +0.3 -0.5	30 - 120 ± 0°-20'
120 - 315 +0.5 -0.8	120 - 315 ± 0°-10'
315 - 1000 +0.8 -1.2	
1000 - 2000 +1.2 -1.6	
2000 - 4000 +2.0 -2.5	
4000 & ABOVE +3.0 -3.5	

SCEND&ASG  
DESIGNED: [Signature]  
DES. CHKD: [Signature]  
DRAWN: [Signature]  
DRG. CHKD: [Signature]  
APPROVED: [Signature]  
SIGN. DATE

TITLE	PROJECTION
MANDREL (NES) SUPPORT STAND FOR SS1	
SHAR CENTRAL DESIGNS & ADVANCED SYSTEMS GROUP SATISH DHAWAN SPACE CENTRE SHAR I.S.R.O.	
SCALE 1:10	DRG. NO. 10-03-SSLV-09-006/A1
SHEET 1 OF 1	





- NOTES :
1. ALL DIMENSIONS SHOWN ARE FINAL MACHINED DIMENSIONS.
  2. ALL THE WELDS ARE OF 6 MM SIZE FILLET UNLESS OTHERWISE SPECIFIED.
  3. ALL WELDS ARE TO BE DP TESTED FOR ROOT AND FINAL PASSES TO ENSURE WELD QUALITY.
  4. ALL BUTT WELDS SHALL BE 100% RADIOGRAPHED.
  5. ALL SUB-ASSEMBLIES SHALL BE PAINTED AS PER USER SPECIFICATION.
  6. CHECK THE STATUS OF THE DRAWING BEFORE FABRICATION/MACHINING.

TOTAL WEIGHT - 2389Kg (Approx)					
11	STIFFENER 90 x 90 x 10THK	IS:2062 GR-B	4	3	
10	PIN Ø100 - 185Lg. WITH M42 NUT & WASHER	En-24	1	6	
9	HEX. BOLT M42 - 200Lg. WITH NUT & WASHER	IS:1364	4	-	8.8 CLASS
8	HEX SOCKET HEAD SCREW M16 - 45Lg. WITH WASHER	IS:2269	8	-	8.8 CLASS
7	HEX. BOLT M20 - 76Lg. WITH NUT & WASHER	IS:1364	6	-	8.8 CLASS
6	HEX. BOLT M 20 - 70Lg. WITH NUT & WASHER	IS:1364	6	-	8.8 CLASS
5	PLATE 370 x 370 x 20THK	IS:2062 GR-B	1	21	
4	BRACKET 275 x 250 x 20THK	IS:2062 GR-B	2	21	
3	TOP END CONNECTOR	IS:2062 GR-B	1		REF. SHEET 2 OF 2
2	BOTTOM END CONNECTOR	IS:2062 GR-B	1	2338	REF. SHEET 2 OF 2
1	SUPPORT STRUCTURE	IS:2062 GR-B	1		REF. SHEET 2 OF 2
S.NO	DESCRIPTION	MATERIAL	QTY	W.T	REMARKS

STATUS	SIGN.	DATE
FOR DISCUSSION		
FOR TENDER	CHANDU	21/8/18
FOR FABRICATION		

DO NOT SCALE THE DRAWING ASK IF IN DOUBT UNLESS OTHERWISE SHOWN ALL DIMENSIONS ARE IN MILLIMETERS REMOVE SHARP EDGES & BURRS CHAMFER 1 M.M. X 45° MACHINING FINISH IN MICRONS :- ▽ B - 25   ▽▽ 1.6 - B ▽▽▽ 0.025 - 1.6   ▽▽▽▽ < 0.025			DEVIATION FOR NON TOLERANCED DIMENSIONS (IS - 2102)			LENGTH IN M.M. OF SHORTER SIDE OF ANGLE UPTO & INCL		
DIAMETERS & LENGTHS UPTO & INCL 6 +0.1 6 - 30 +0.2 30 - 120 +0.3 120 - 315 +0.5 315 - 1000 +0.8 1000 - 2000 +1.2 2000 - 4000 +2.0 4000 & ABOVE +3.0			1 - 6 ± 1'-0d 6 - 30 ± 0'-3d 30 - 120 ± 0'-2d 120 - 400 ± 0'-1d					

SCEND&ASG		DESIGNED		DRAWN		APPROVED		SIGN.		DATE	

TITLE						PROJECTION	
GA OF MANDREL(NES)TRANSPORTATION SYSTEM WITH END CONNECTORS FOR SS1 AT CASTING FACILITY OF SPP							
SHAR CENTRAL DESIGNS & ADVANCED SYSTEMS GROUP SATISH DHAWAN SPACE CENTRE SHAR I.S.R.O SRIHARIKOTA							
SCALE 1:20						SHEET 1 OF 2	
DRG. NO. 10-03-SSLV-09-001/A1							
SCEND/AB152/2018/SSLV/CHANDURAGHU							



